

AMENDMENT TO THE CLAIMS

Please amend the claims as follows. This listing of claims will replace all prior versions and listings of the claims.

1. (Currently Amended) A method of providing RF shielding for a ~~patient~~ nuclear magnetic resonance (NMR) apparatus comprising a substantially cylindrical NMR magnet configured for an NMR procedure, comprising:

placing the a patient on a radio-opaque holder having a rigid surface defining an opening at a magnet end that substantially matches an opening defined by a patient-end surface of the NMR magnet, the holder comprising RF shielding configured for forming a substantially complete RF shield around the patient when the holder is adjoined to the cavity of a magnet associated with magnet RF shielding; and

adjoining the holder to the cavity.

adjoining the rigid surface of the holder to the patient-end surface of the NMR magnet so that the rigid surface abuts against the patient-end surface and electrically couples to a radio-opaque portion of a cryostat of the NMR magnet, the NMR magnet comprising a service end adjoined to a radio-opaque covering that is electrically coupled to the cryostat,

wherein, when the rigid surface of the holder abuts and adjoins to the patient-end surface of the NMR magnet, the radio-opaque covering, the radio-opaque portion of the cryostat, and the holder form a substantially complete and substantially continuous RF shield operative to prevent RF signals from interfering with an NMR procedure conducted using the NMR magnet.

2. (Currently Amended) The method of claim 1, further comprising placing ~~an RF shield~~ the covering over the service end of the magnet.

3. (Original) The method of claim 1, wherein the holder comprises a bottom portion comprising RF shielding.

4. (Original) The method of claim 3, wherein the holder further comprises a canopy comprising RF shielding.

5. (Original) The method of claim 3, wherein the holder further comprises a patient end cap comprising RF shielding.

6. (Original) The method of claim 4, wherein the canopy removably attaches to the bottom portion.

7. (Original) The method of claim 5, wherein the patient end cap removably attaches to the bottom portion or is integral to the bottom portion.

8. (Original) The method of claim 5, wherein the patient end cap comprises apertures.

9. (Original) The method of claim 3, wherein the bottom portion comprises apertures.

10-11. (Cancelled)

12. (Currently Amended) The method of claim 1 ~~11~~, wherein the substantially complete and continuous RF shield ~~magnet-RF-shielding-further~~ comprises an RF shield liner configured to combine with the service end cap and the holder ~~holder-RF-shielding-to-form-a substantially complete RF shield~~.

13. (Original) The method of claim 1, further comprising a positioning means attached to the holder.
14. (Original) The method of claim 13, wherein the positioning means comprises a support configured to support the holder and means for locomotion.
15. (Original) The method of claim 14, wherein the means for locomotion comprises wheels.
16. (Original) The method of claim 14, wherein the means for locomotion comprises rollers.
17. (Original) The method of claim 1, wherein the holder further comprises a patient support unit.
18. (Original) The method of claim 1, wherein the patient support unit comprises an RF transmitter antenna and an RF receiver antenna.
19. (Original) The method of claim 17, wherein the patient support unit comprises an RF coil.
20. (Original) The method of claim 1, where the patient is an animal.
21. (Original) The method of claim 20, wherein the patient support unit comprises a support configured to hold an animal.
22. (Original) The method of claim 1, where the patient is human.

23. (Original) The apparatus of claim 22, wherein the patient support unit comprises a support configured to hold a human.

24. (Original) The method of claim 21, wherein the support is adapted to hold an animal in an inverted position.

25. (Original) The method of claim 24, wherein a cross section of the support is configured substantially to match the curvature of an animal's spine.

26. (Original) The method of claim 25, wherein a cross section of the support is substantially U-shaped.

27. (Original) The method of claim 25, wherein a cross section of the support is substantially V-shaped.

28. (Original) The method of claim 21, wherein the patient support unit comprises straps for holding an animal.

29. (New) The method of claim 1, wherein the holder is configured to hold and support the body of an animal patient.

30. (New) The method of claim 1, wherein the magnet is configured to remain stationary while a patient is moved wholly or partly into the cavity of the magnet.

31. (New) The method of claim 1, wherein the system further comprises the NMR magnet and ancillary coils and magnets associated with a magnetic resonance process that

are located inside the NMR magnet, wherein the RF shield is configured to enclose all of the ancillary coils and magnets so that there are no ancillary coils and magnets outside the RF shield.

32. (New) The method of claim 1, wherein the opening defined by the rigid surface of the magnet end of the holder and the substantially matching opening defined by the patient-end surface of the magnet have substantially circular shapes.

33. (New) The method of claim 1, wherein the RF shield is configured to prevent all RF signals that could interfere with a nuclear magnetic resonance measurement from passing from an area outside the RF shield to an area inside the RF shield.

34. (New) The method of claim 1, wherein the holder is configured to abut and adjoin to the patient end of the magnet so that there are no gaps between the holder and the patient end of the magnet through which could pass an RF signal that could materially interfere with a nuclear magnetic resonance measurement occurring inside the RF shield.